

CLAIMS

I claim:

1. A water purification device that purifies water as a user drinks or sucks the water through the device, the purification device comprising:

an inlet section with primary and secondary filters for removing turbid impurities, bacteria and viruses larger than one micron wherein,

the inlet section also includes an iodinated media for killing impurities and a scavenger media for removing residual iodine;

a multi-stage purifying apparatus, comprising:

a first water purification section containing a second iodinated media for killing impurities;

a second water purification section containing a second scavenger media for removing residual iodine;

a third water purification section containing granular activated charcoal for enhancing smell and taste of the water; and

a fourth water purification section containing a hepatrophic media for disinfecting any backwash from the user;

and; an outlet section that dispenses the purified water to the user.

2. The water purification device of claim 1 wherein, the outlet section is a canteen insert adapter that provides a water tight seal when the purification device is inserted into the neck of a canteen, the canteen insert adapter comprising a flange mouthpiece for dispensing purified water directly to the user.

3. The water purification device of claim 2 wherein, the canteen insert adapter further comprises a straw adapter for attachment of a flute straw that may

be used to deliver the purified water to the user.

4. The water purification device of claim 1 wherein, the outlet section includes a flute straw mouthpiece that is in the general shape of a D, the D-shaped straw mouthpiece allowing the user to use the purification device in the same manner as a traditional straw by submerging the inlet section of the purification device in an impure water source and providing suction at the mouthpiece to purify and consume the water.

5. The water purification device of claim 1 wherein the device is used as an inline purifier in a water line, wherein:

the inlet section is arranged so that water enters only through its base surface area and the inlet section further comprises a water source inlet portion that is inserted into the water line and receives impure water; and

the outlet section is inserted into the water line portion that leads to the user's mouth and passes purified water into the water line.

6. A method of purifying water through a tubular purification device that allows a user to drink purified water directly from the purification device comprising the steps of:

providing an inlet section that allows entry of water into the purification device, the inlet section comprising,

primary and secondary filters for removing turbid impurities, bacteria and viruses larger than one micron,

a first iodinated media for killing impurities, and

a first scavenger media for removing residual iodine;

passing the water from the inlet section to a multi-stage purification apparatus for further purification and taste and smell enhancement, the multi-

stage purification apparatus comprising,

- a first water purification section containing a second iodinated media for killing impurities,
- a second water purification section containing a second scavenger media for removing residual iodine,
- a third water purification section containing granular activated charcoal for enhancing smell and taste of the water, and
- a fourth water purification section containing a heterotrophic media for disinfecting any backwash from the user; and

providing an outlet section that receives the water from the multi-stage purification apparatus and dispenses the purified water to the user.

7. The method of claim 6 wherein, the step of providing an outlet section further comprises the step of making the outlet section into a canteen insert adapter that provides a water tight seal when the purification device is inserted into the neck of a canteen wherein, the canteen insert adapter comprises a flange mouthpiece for dispensing purified water directly to the user.

8. The method of claim 7 wherein, the canteen insert adapter further comprises a straw adapter for attachment of a flute straw that may be used to deliver the purified water to the user.

9. The method of claim 6 wherein, the step of providing an outlet section further comprises the step of making the outlet section into a straw mouthpiece that is in the general shape of a D, the D-shaped straw mouthpiece allowing the user to use the purification device in the same manner as a traditional straw by submerging the inlet section of the purification device in an impure water source and providing suction at the mouthpiece to purify and consume the water.

10. The method of claim 6 wherein, the step of providing an inlet section further comprises the steps of:

- arranging the inlet section so that water enters only through the terminal base end of the inlet section; and
- providing an inlet insert section that connects to a water line wherein, the inlet insert section receives impure water from the water line and passes the water to the inlet section for filtration and purification;
- and the step of providing an outlet section further comprises the step of adding an outlet insert section that is inserted into a water line portion that leads to the user's mouth, the outlet insert section passing purified water from the multi-stage purification apparatus into the water line portion for subsequent consumption by the user.